

Extension Contact of Ohio Farm Housewives

Everett M. Rogers

A. Eugene Havens



OHIO AGRICULTURAL EXPERIMENT STATION
Wooster, Ohio

The Ohio State University



3 6267 01197236 4

This page intentionally blank.

EXTENSION CONTACT OF OHIO FARM HOUSEWIVES

Everett M. Rogers—A. Eugene Havens

SUMMARY

Purposes of the present study are (1) to report the characteristics of farm homemakers who are "users" and "non-users" of home economics agents; and (2) to compare the present findings with previous results from studies of the extension contact of farmers. Data were gathered from 88 farm homemakers who are wives of a statewide random sample of Ohio commercial farmers.

The major findings of the present study may be summarized as follows.

1. Impersonal types of Extension contacts through reading, watching or listening to mass media communications reached more than *twice* as many homemakers as personal types of Extension contact. About one-fourth of the respondents had no personal Extension contact during the year preceeding the interview.

2. Homemakers with greater Extension contact were characterized by more years of education, higher social status, earlier adoption of homemaking magazines, greater knowledge about the Extension Service, and closer acquaintance with the home economics agent.

3. The husbands of farm homemakers with a high degree of Extension contact also have a high degree of contact; Extension contact appears to be a "family trait".

4. Similar factors were related to Extension contact for both farmers and farm housewives. One explanation may lie in the high interrelationships between husband-wife Extension contact and adopter category.

INTRODUCTION

Research workers in state agricultural experiment stations, the U.S.D.A., and commercial research laboratories have developed a vast amount of farm and home technology in recent years. Among these new homemaking practices are: wash and wear fabrics, frozen foods, colored light bulbs and appliances, improved food wrappings, food mixes, instant foods, and many types of household equipment.

Little research work is performed by homemakers themselves. Rather, it is completed by government and commercial scientists and so diffusion of home-making innovations is a problem in *communication*.

Various governmental and commercial agencies have been established to provide an organized system for communicating innovations to farm homemakers. These agencies may be called "change agencies" and their employees, change agents. *Change agents* are persons who attempt to secure changes in the behavior of their constituents. Examples of change agents are home economics agents¹, county agricultural agents, and vocational homemaking teachers.

Perhaps the change agents should contact individuals who have the greatest need for educational assistance. Previous research, however, revealed that change agencies do not reach all segments of the population equally. One publication stated:

Through our present method of teaching, we have not been effective in reaching young families, low-income families, and families in densely populated centers².

This is not a criticism of the work of Extension agents; in fact, it may be a method of maximizing their potentials. There is widespread belief that the lower-income and educationally-disadvantaged homemakers are reached by the "trickle down process." This trickle-down theory is the process whereby certain homemakers (often called "leaders") have *direct* contact with Extension agents, and then pass this information on to other homemakers in the community by word-of-mouth. While only a portion of an Extension agent's constituents may have *direct* contact with him, numerous others in his constituency may have *indirect* contact through opinion leaders.

Several research studies have been concerned with communication between *agricultural* Extension agents and their constituents but few have been concerned

¹The official title in Ohio is now "county Extension agent, home economics", but in the present bulletin these change agents will be referred to more simply as "home economics agents".

²Carlton F. Christian, *History of Cooperative Extension Work in Agriculture and Home Economics in Ohio*, Columbus, Ohio Agricultural Extension Service Bulletin, 1959.

with communication behavior between home economics agents and homemakers.³ There is a need to determine whom home economics agents are reaching with their educational methods and the reasons why their constituents utilize them as an informational source. It is hoped that this knowledge will prove helpful not only to home economics agents, but to all types of change agents.

PURPOSES

Purposes of the present publication are (1) to report the characteristics of farm homemakers who are "users" and "non-users" of home economics agents; and (2) to compare the present findings with previous results from studies of Extension contact of farmers. The central concern is upon the behavioral patterns in communication between Ohio farm homemakers and home economics agents.

METHOD OF STUDY

Ninety sample areas were randomly selected at different locations throughout Ohio as shown in Figure 1. Each of these sample areas was approximately one square mile in size. Area sampling is often used when an adequate sampling frame (such as a list of names) is not available.

The farm operators and their wives residing in the sample areas were interviewed if they met these qualifications: (1) operated at least 20 acres; (2) operated the present farm for two years; and (3) worked off the farm for pay less than 100 days in 1956. Each "commercial" farm family in Ohio had about one chance in 410 of being in the sample. The 88 farm homemakers in the present sample who were interviewed were wives of the farmers meeting these qualifications.⁴ Therefore, the sample can not be regarded as a random sample of all of the home economics agent's clientele. The home economics agent works with many rural non-farm homemakers and part-time farmers' wives as well as urban homemakers.

The housewives were asked how much contact they had with two change agents, the home economics agent, and the vocational home economics teacher. The present publication is primarily concerned with the characteristics of the constituents of the home economics agent.

³ A comparison study of farmer contacts with county agricultural agents is Everett M. Rogers and Harold R. Capener, *The County Extension Agent and His Constituents*, Wooster, Ohio Agricultural Experiment Station Research Bulletin 858, 1960.

⁴ The wives of 16 farmers in the sample areas could not be interviewed after two attempts; for this reason, the farmer sample numbers 104 and the homemaker sample 88.

EXTENSION CONTACT

The present study is concerned with the communication behavior of homemaking innovations from home economics agents to homemakers. There are many different channels through which innovations may be communicated. These channels range from the various mass media to personal relationships.

The voluntary contact of constituents with their home economics agent may be classified as (1) *personal* or (2) *impersonal*. Personal contacts entail face-to-face communication, while impersonal contacts include reading or listening to mass media communications.

PERSONAL CONTACT

The farm housewives were asked which, if any, of four different types of personal contact they had with their home economics agent during the year preceeding the interview. The percentage of homemakers having each type of personal contact with their home economics agent are shown in Table 1.

Table 1. Types of Personal Contact
with Home Economics Agent

Type of Personal Contact	Number of Respondents	Per- cent*
Visited home economics agent in her office or called her on the telephone	20	23
Home economics agent visited respondent's home	15	17
Helped plan Extension program	13	15
Attended local or county meet- ings, tours, or demonstrations	5	6
No personal contact	58	66

*Percentages do not add to 100
because respondents could have
more than one type of contact.

The number of respondents with each degree of personal contact with their home economics agent are shown in Table 2.

Two-thirds of the respondents (66 percent) had no personal contact with their home economics agent during the year preceeding the interviews. Only 2 percent had all four types of personal contact.

Impersonal Contact

A measure of impersonal contact with home economics agent also utilized in the present study. The number of homemakers with each type of impersonal contact with their home economics agent is shown in Table 3.



Figure 1. Location of sample areas in which farm homemakers were interviewed.

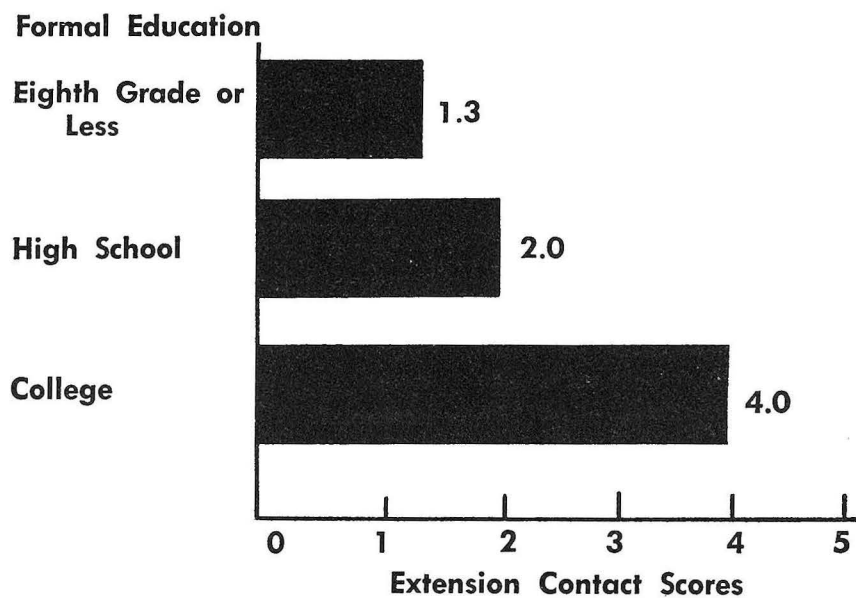


Figure 2. Extension contact scores by education

Table 2. Number of Personal Contacts with Home Economics Agent

Number of Personal Contacts	Number of Respondents	Percent
None	58	66
One	14	16
Two	6	7
Three	8	9
Four	2	2
Total	88	100

Table 3. Type of Impersonal Contact with Home Economics Agents

Impersonal Type of Contact	Number of Respondents	Percent*
Watched or listened to home economics agent on TV or radio show	34	39
Read a circular letter, mailed announcement, or bulletin from home economics agent	34	39
Read any newspaper articles written by home economics agent	44	50
No impersonal contact	25	28

*Percentages do not add to 100 because respondents could have more than one type of contact.

The number of respondents with each type of impersonal contact are shown in Table 4. Twenty-eight percent of the homemakers had no impersonal contact with their home economics agent. However 15 percent had all three types of contact.

Table 4. Number of Extension Impersonal Contacts

Number of Impersonal Contacts	Number of Respondents	Percent
None	25	28
One	27	31
Two	23	26
Three	13	15
Total	88	100

There was some tendency for the same respondents who had personal contact to also have impersonal contact (Table 5).

Table 5. Personal Contact with Home Economics Agent by Those Also Having Impersonal Contact

Personal Contact	Impersonal Contact		Total
	No Contact	Some Contact	
No Contact	26%	40%	66%
Some Contact	2%	32%	34%
Total	28%	72%	100%

About one-fourth (26 percent) of the homemakers in the present sample had neither personal nor impersonal contact with the home economics agent. Impersonal contacts reached a number (40 percent) of the homemakers who did not have personal contact. However, only 2 percent of the personal contacts reach homemakers with no impersonal contact.

Extension Contact Scale

The overall measure of contact with the home economics agent utilized in this publication is the Extension Contact Scale. The Extension Contact Scale included both personal and impersonal types of contact with the home economics agent. One point was awarded for each type of personal or impersonal contact with the home economics agent. The distribution of total Extension Contact Scores is shown in Table 6.

Table 6. Frequency of Extension Contacts

Number of Extension Contacts	Number of Respondents	Percent
None	23	26
One	20	23
Two	15	17
Three	13	15
Four	5	6
Five	7	7
Six	5	6
Seven	0	0
Total	88	100

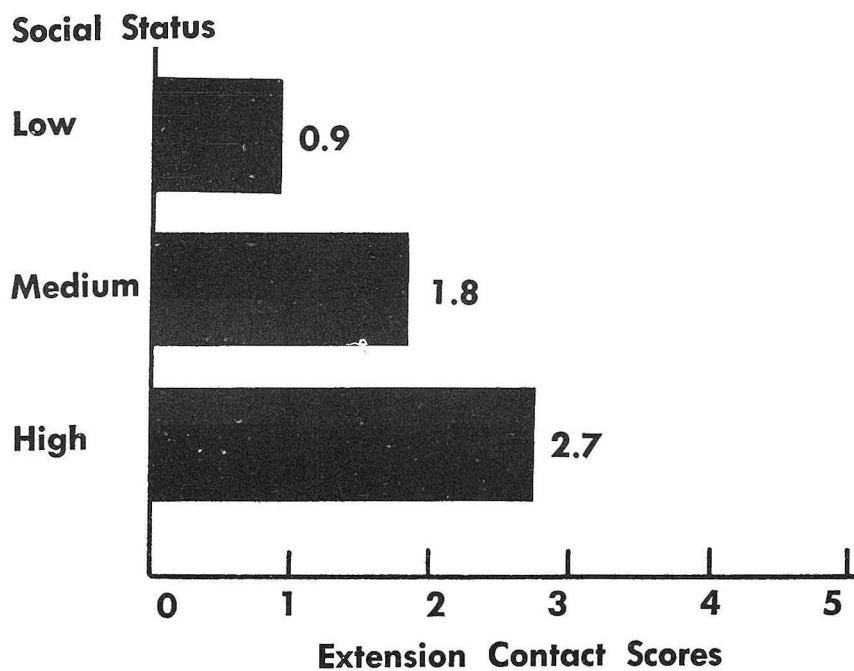


Figure 3. Extension contact scores by social status

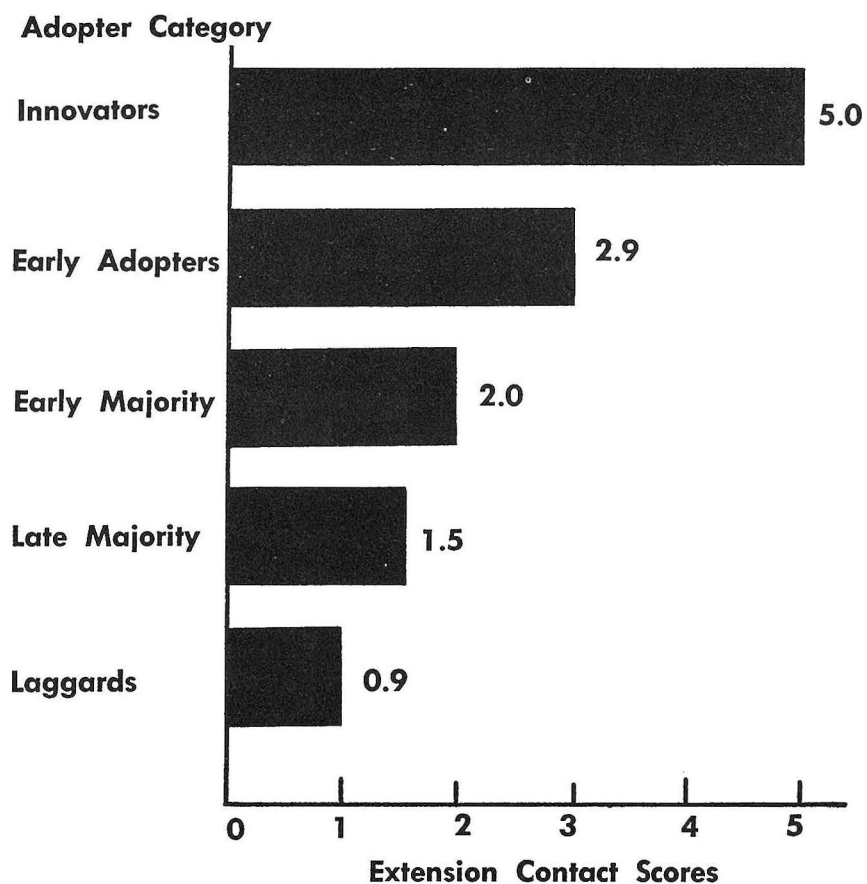


Figure 4. Extension contact scores by adopter category

Wide differences in the degree of contact with their home economics agent were displayed by the respondents in the present study. Twenty-six percent had no contact whereas 6 percent had six types of contact. The average score for the 88 homemakers is 1.98, or almost 2 types.

Some change agents perceive their audience as a dichotomy of (1) "cooperators", and (2) "non-cooperators". It should be plain that in the present study, the home economics agent's constituents are placed on a *continuum* from high to low Extension contact⁵.

CHARACTERISTICS ASSOCIATED WITH EXTENSION CONTACT

Ohio farm homemakers have various degrees of contact with their home economics agent. The present section reports characteristics associated with degree of Extension contact.

Personal Characteristics

Age

There is no significant relationship between Extension contact and age⁶. Older homemakers had a similar degree of Extension contact to that of younger homemakers.

Education

Extension contact is related to years of education (Figure 2). Homemakers with more years of education have greater contact with their home economics agent.

Social Status

Homemakers with greater Extension contact are characterized by a higher social status (Figure 3). Social status was rated by the interviewers at the conclusion of each interview. The interviewers considered the respondent's material possessions (home, automobile, and other items), education, and community prestige. These factors have been found to be the best indicators of social status by previous research.

⁵The Extension Contact Scale is similar to the measure utilized in the study of 104 Ohio farmers. The farmer Extension Contact Scale was found to be undimensional, reliable, and internally consistent by Rogers and Capener, *op. cit.*

⁶Tests of significance for each of the characteristics related to Extension contact scores are presented in the Appendix.

Venturesomeness

A measure of venturesomeness was developed from the respondent's stated willingness to try six hypothetical homemaking innovations. There was no relationship between venturesomeness and Extension contact.

Adoption Behavior

Respondents were asked whether or not they had adopted each of 25 new homemaking practices. For each practice, respondents were asked what date they had adopted. From these data, an Adoption-of-homemaking-Practices Scale was constructed. Higher adoption scores indicated a tendency to adopt more innovations and also to adopt at a relatively earlier date than other homemakers in the present sample.

Homemaking practices in the adoption scale were: automatic coffeemaker; electric fry-pan; electric food-blender; home freezer; coolvent ironing board; home air conditioner; seran wrap; brown and serve rolls; colored light bulbs; automatic clothes washer; electric dishwasher; broiling meat; colored appliances; frozen juice; packaged baking mixes; meat tenderizer; aluminum foil; frozen meats; water softener; family hospitalization; vinyl plastic flooring; planting garden varieties recommended for freezing; rug shampoos; dacron clothing fabrics; and commercial rug cleaning. These practices were not necessarily recommended by the home economics agent. Instead, they were designed to measure the over-all degree of adoption of new homemaking practices, whether Extension-recommended or not.

Rural sociologists and Extension agents commonly refer to farmers as "innovators", "early adopters", "early majority", "late majority", and "laggards". Innovators are the first to adopt and laggards are the last. Homemakers were categorized into these five adopter categories with the Adoption-of-Homemaking Practices Scale in a similar fashion. Innovators had the highest adoption scores and laggards the lowest scores.

The relationship between adoption scores and Extension contact scores is shown in Figure 4. The present findings indicate that innovators have the highest Extension contact scores, and laggards have the lowest Extension contact scores. This finding is somewhat contrary to past research studies with farmers. Farmer-innovators have been found to have less contact with local change agents than early adopters. Past studies indicate that farmer-innovators tend to bypass local Extension agents and travel directly to scientists for farm information. The findings in the present study are tentative since only two

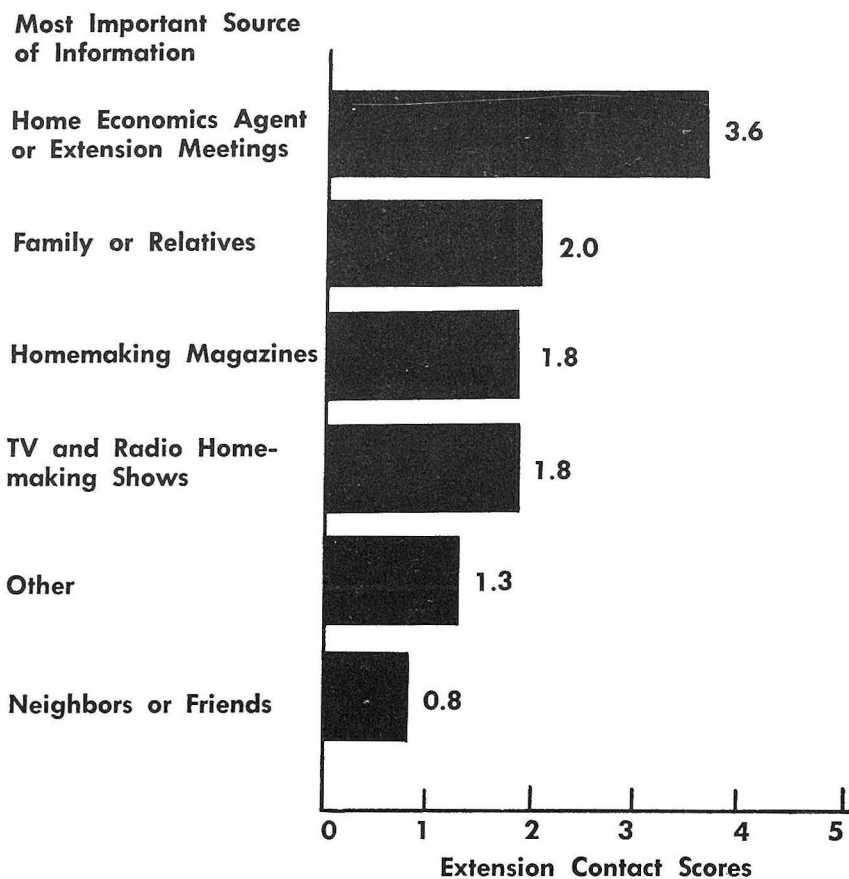


Figure 5. Extension contact scores by most important information source

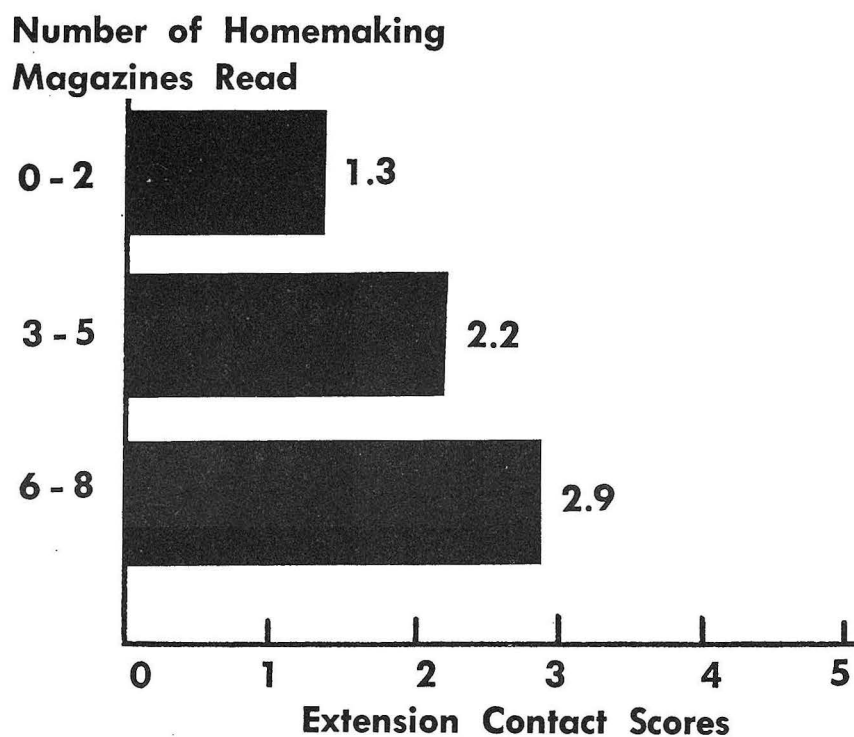


Figure 6. Extension contact scores by number of homemaking magazines read

homemakers were categorized as innovators. Perhaps homemaker-innovators are less mobile than farmer-innovators, and are forced to limit their sources of information to local change agents.

Communication Behavior

Past research studies indicate that farmers with high Extension contact utilize different communication sources than farmers with low Extension contact⁷. Does a similar trend hold true for farm homemakers?

Information Sources

The respondents were asked their most important sources of information about new homemaking practices (Table 7). The way in which this question was asked probably led homemakers to report information sources at the awareness stage of the adoption process rather than at the evaluation-application stage. Mass media sources, (homemaking magazines, television, and radio shows) were more important (60 percent in total) as information sources than personal sources. However, the home economics agent was listed as the second most important source of information.

Table 7. Most important Sources of Information about New Homemaking Practices*

Information Sources	Number of Respondents	Percent
Homemaking magazines	37	42
Home economics agent or Extension meetings	16	18
TV homemaking shows	15	17
Neighbors or friends	9	10
Family or relatives	4	5
Vocational homemaking teacher	1	1
Radio homemaking shows	1	1
Other sources	5	6
Total	88	100

*It should be cautioned that this table presents the "most important" information sources for each respondent. The distribution of percentages is essentially similar, however, when each respondent was allowed to name more than one "important" information source.

Figure 5 shows the relationship between most information sources and Extension contact.

⁷Rogers and Capner, *op.cit.*:

Homemaking Magazines

The 88 homemakers were asked how many homemaking magazines they read. One percent of the homemakers read no magazines while two percent read as many as eight different magazines. The average number of magazines read was 3.4. Figure 6 indicates that the number of magazines read is related to the degree of Extension contact. Homemakers who read more magazines have higher Extension Contact Scores.

Source of Research

Homemakers were also asked where research work to develop new homemaking practices takes place. Twenty-three percent of the homemakers thought that commercial sources are responsible for most research work in home economics. Thirty-two percent did not know. Seven percent thought that the Ohio Agricultural Experiment Station was responsible for most research on new homemaking practices. Figure 7 shows Extension contact scores by perceived source of home economics research. It is interesting to note that homemakers who do not know where research is done have the lowest contact scores.

The present study also indicates that no homemakers had direct contact with scientists. Farmers who have direct contact with scientists (almost 11 percent of a sample) tend to be innovators⁸. Perhaps homemakers do not have the opportunity for direct contact with scientists that farmers do.

The homemakers were also asked if they had any contact with vocational homemaking teachers. There was no relationship between contact with vocational homemaking teachers and Extension contact scores.

Opinion Leadership

The present study indicates that homemakers vary as to the degree of information-seeking contact they have their home economics agent. Extension efforts seem most likely to reach housewives with more education, higher social status, earlier adoption of innovations, and certain other characteristics.

There is widespread belief that the homemakers without direct Extension contact are reached indirectly by the "trickle-down" process, described earlier in the present bulletin. The trickle-down process

⁸Everett M. Rogers, *Characteristics of Innovators and Other Adopter Categories*, Wooster, Ohio Agr'l. Exp. Station Research Bulletin, (in press).

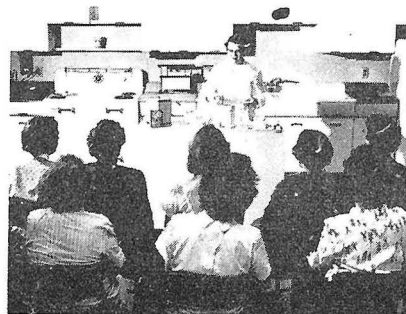


Figure 8. Homemaking opinion leaders receive information from home economics agents and pass it along to friends and neighbors

**Where Homemakers Think
Most Research Work Is
Done In Home Economics**

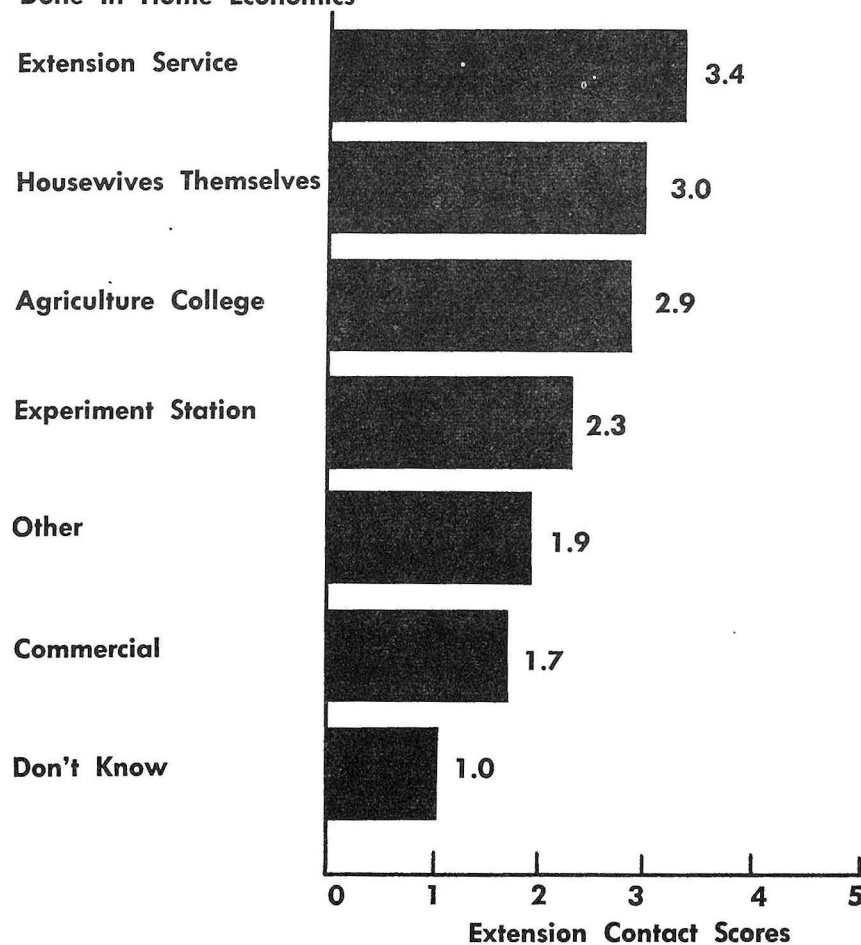


Figure 7. Extension contact scores by perceived sources of home economics research

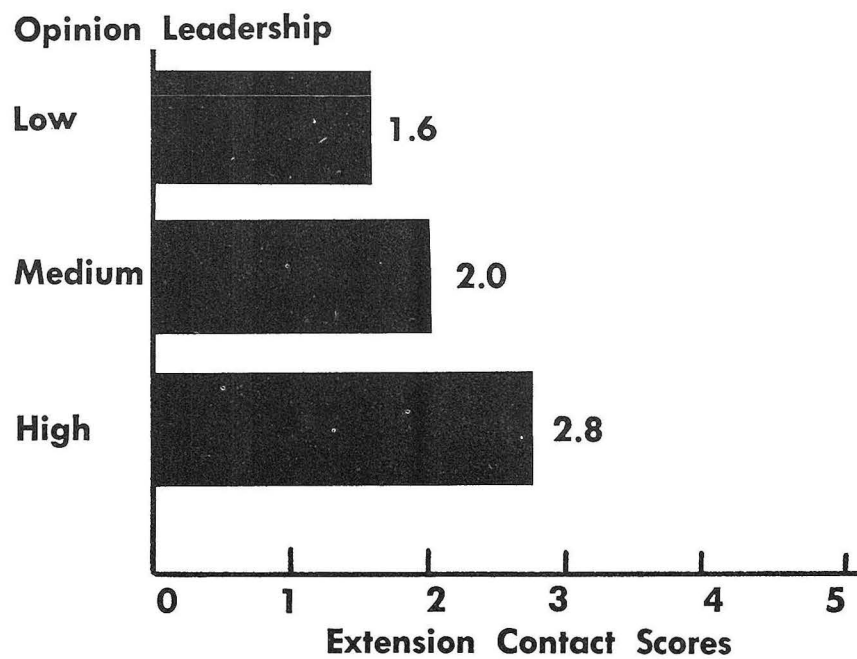


Figure 9. Extension contact scores by opinion leadership

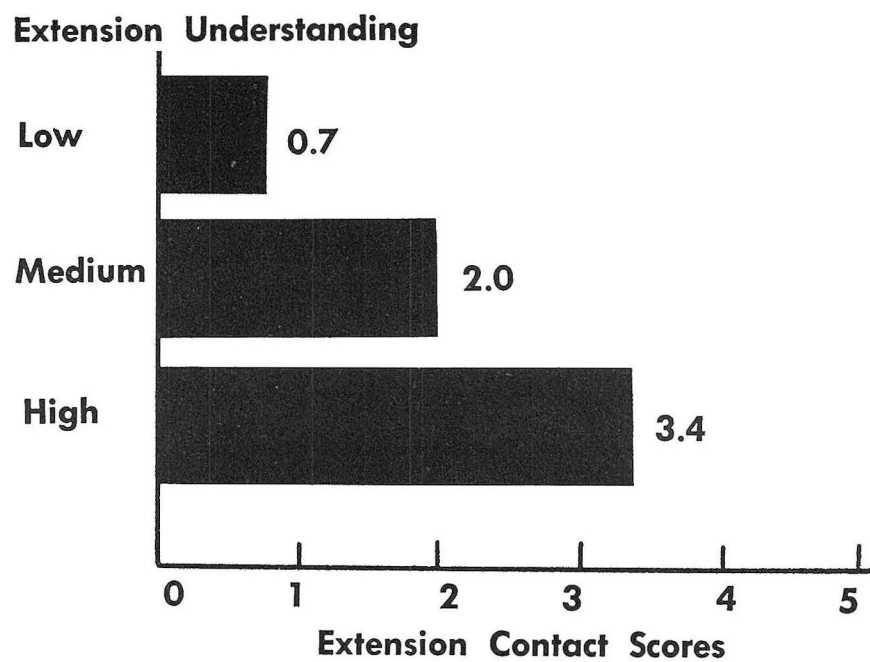


Figure 10. Extension contact scores by understanding of the extension service

is actually a special case of a more general communication model which sociologists have observed in a variety of information-transmitting situations. Lazarsfeld and others first postulated in their two step flow of communications that "ideas often flow from radio and print to the opinion leaders and from them to less active sections of the population"⁹. Later studies have confirmed the existence of this type of information-flow among farmers and consumers.

A more recent analysis of the two-step flow of communication indicated that opinion leaders may secure their information *not only* from mass media but from any relevant source¹⁰. Information about new homemaking practices originates with scientists and one relevant source for homemakers is the home economics agent. Homemaking opinion leaders are expected to secure technological information from the home economics agent and then pass this information along to their neighbors and friends (Figure 8).

Much of the Extension Service educational program is geared through leader-training methods. This is especially true in home economics and 4-H Club work. Special materials are prepared and meetings are held to train leaders. Then these leaders are expected to present the information to their neighbors and friends¹¹.

Opinion leadership scores¹² are not significantly related to contact with home economics agents (Figure 9). This finding indicates that homemaker opinion leaders do not have significantly more Extension contact than homemakers with less opinion leadership.

Understanding of the Extension Service

It was expected that homemakers with more adequate understanding of the Extension Service would have greater Extension contact. In order to measure understanding of the Extension Service, the respondents were presented three statements with which they could agree, disagree, or partly agree. The statements dealt with (1) the connection between the Farm Bureau

and the Extension Service; (2) with the connection between 4-H Clubs and the Extension Service; and (3) with the purpose of the county Extension advisory committee. Respondents varied widely as to their understanding of the Extension Service. Seventeen percent gave the incorrect response to all three questions; only 12.5 percent responded correctly to all three items.

Homemakers who had a more adequate understanding of the Extension Service were more active in seeking information from their home economics agent (Figure 10). Homemakers with a more adequate understanding of the Extension Service are also characterized by:

1. Higher adoption-of-homemaking-practice scores
2. Higher social status
3. More traditional beliefs
4. Higher opinion leadership

The rather high relationship between understanding of the Extension Service and Extension contact may suggest that one method of reaching more people with an Extension program is to first provide them with more adequate information about the Extension Service. It is not safe to conclude from the present data that lack of Extension understanding *causes* a lack of Extension contact. However, it seems logical to assume that homemakers who are poorly informed about the Extension Service are less likely to turn to the home economics agent for information and advice.

Acquaintance with Home Economics Agent

The 88 respondents were also asked if they were acquainted with the home economics agent in their county. Sixty-six percent of the respondents did not know the home economics agent. Thirty-four responded that they were acquainted with the home economics agent and 30 percent said they knew her personally. The relationship between acquaintance with the home economics agent and Extension contact is in Figure 11.

COMPARISON OF HOMEMAKERS AND FARMERS IN EXTENSION CONTACT

Is Extension contact a family trait, that is, are homemakers with high Extension contact the wives of farmers with high contact? Are the characteristics related to Extension contact of homemakers similar for farmers? The present study provides answers to these two questions.

Extension educational efforts in homemaking and in agriculture are obviously interrelated. This has become even more true in recent years as a result of

⁹Paul F. Lazarsfeld and others, *The People's Choice*, N.Y. Duell, Sloan and Pearce, 1944, p. 151.

¹⁰Elihu Katz and Paul Lazarsfeld, *Personal Influence*, Glencoe, Illinois Free Press, 1955.

¹¹The use of leaders by Extension agents implies a recognition that any change agent has more persons in his audience than he can possibly reach with personal contact. Because personal contact is a scarce resource, it should be maximized to secure the diffusion and adoption of innovations. One method of maximizing the agent's personal contacts is through training of leaders.

¹²The opinion leadership scale consisted of six items that had been used in a previous study. Typical items were: (1) told someone about a new homemaking practice within the past six months; (2) likely to be asked for advice about new homemaking practices; and (3) tried to convince friends of new homemaking practices in personal discussions.

Do You Know the Home Economics Agent in Your County?

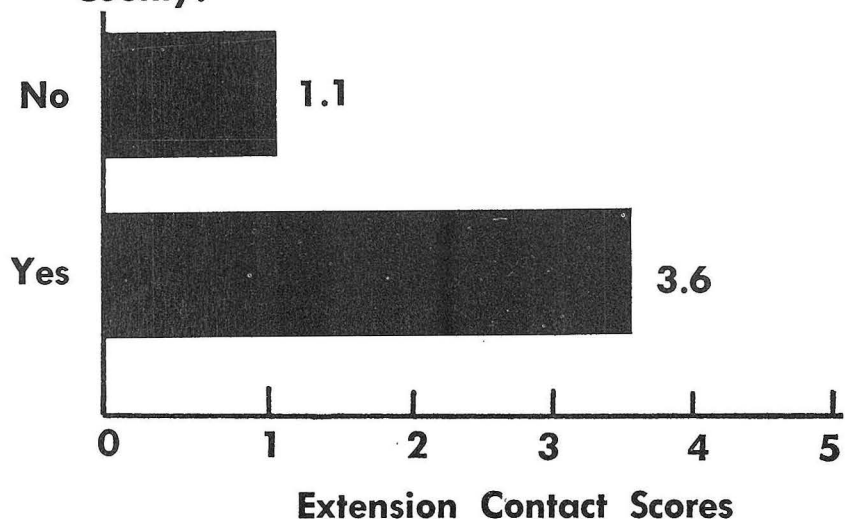


Figure 11. Extension contact scores by acquaintance with home economics agent

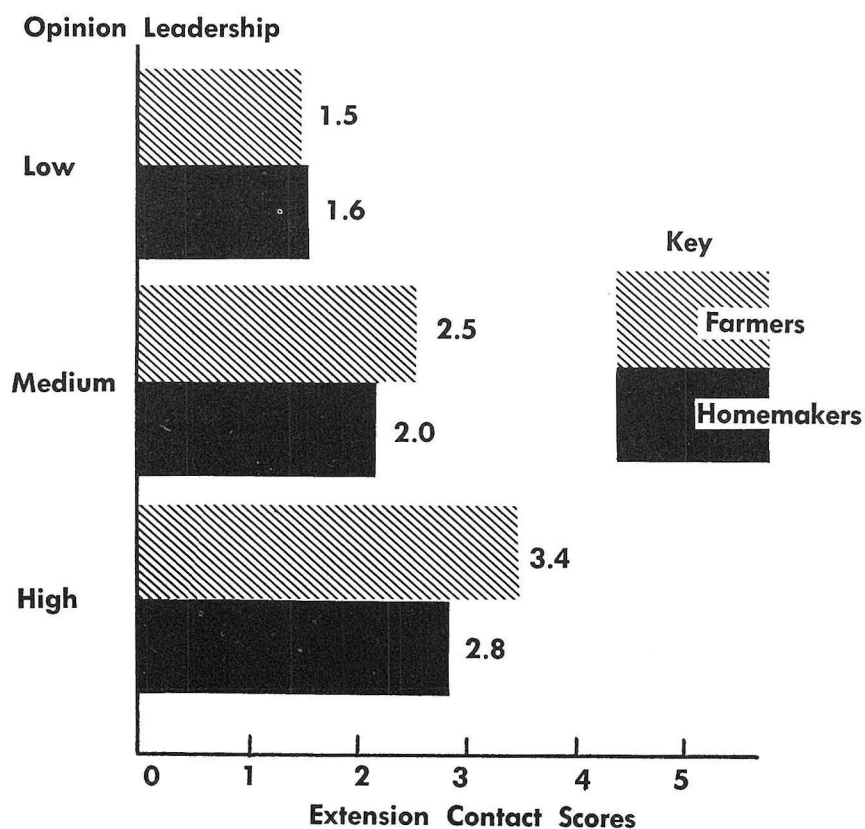


Figure 12. Relationship of extension contact to opinion leadership for both farmers and farm homemakers

the farm and home development approach in the Extension Service. This approach calls for joint effort by the home economics agent and the agricultural agent in working with *both* the farmer and his wife. If the homemaker and the farmer display similar Extension contact and communication behavior, then the joint approach should be effective. However, if differences exist in communication behavior of husband and wife, different techniques might be more appropriate.

Husband-Wife Similarities in Extension Contact

Is Extension contact a family trait? Table 8 indicates that the husbands of homemakers with a high degree of Extension contact also have a high degree of contact.

Table 8. Extension Contact of Farmers and Their Wives

Degree of Extension Contact for Farmers*	Degree of Extension contact for Farmer Homemakers*				
	None	Low	Medium	High	Total
None	7	7	1	1	16
Low	12	11	1	4	28
Medium	4	10	6	1	21
High	0	4	9	6	19
Total	23	32	17	12	84

* Degree of Extension contact was categorized into none, low (one or two contacts), medium (three or four contacts), and high (five or six or seven contacts) for the sake of presentation in this table.

Similarities in Characteristics Related to Extension Contact

The present investigation is part of a larger study of communication behavior and Extension contact. Data were available which would allow comparisons to be made between characteristics related to Extension contact for both farmers and homemakers. Characteristics related to Extension contact of farmers was reported in an earlier publication¹³. The following characteristics were similar for both farmers and homemakers.

Table 9 indicates that the *same* seven factors were related to Extension contact for farmers and homemakers. However, these factors differed in the order of importance with which they were related to Extension contact. For both farmers and homemakers no significant relationship was found between Extension contact scores and (1) age or (2) venturesomeness.

Opinion Leadership

Figure 12 shows the relationship of opinion leadership to Extension contact for both farmers and home-

makers. Low opinion leadership scores for both farmers and homemakers were associated with low Extension contact scores. The relationship between opinion leadership and Extension contact scores is significant for farmers but not for farm homemakers. These findings suggest that Extension agents generally tend to have most contact with farmers (but not homemakers) who act as opinion leaders. There are many opinion leaders, particularly homemakers who have relatively low Extension contact. Our analysis showed that opinion leadership is not necessarily a family trait; that is, the wives of farmer opinion leaders were not necessarily opinion leaders among homemakers.

Adopter Category

Both farmers and homemakers displayed generally similar relationships between adopter category and Extension contact (Figure 13). As was stated earlier, perhaps homemaker-innovators have fewer means to contact scientists directly for information than do farmer-innovators. Farmer-innovators tend to go directly to agricultural scientists for information and by-pass the local agents.

One possible reason for the similar relationships shown in Figure 13 between adopter category and Extension contact may be the relationship between husband's and wife's adopter category. Are farmers and their wives similar in adoption-of-innovations? Table 10 shows there is a high relationship between the adoption of innovators for farmers and their wives. (Appendix).

Table 10 indicates that the adoption of innovators is a "family dimension". That is, if the husband adopts innovations relatively early, the wife adopts innovations relatively early also. The present findings are generally supported by those of Wilkeming¹⁴.

¹³Rogers and Capener, *op.cit.*

¹⁴Eugene A. Wilkeming, *Adoption of Improved Farm Practices As Related to Family Factors*, Madison, Wisconsin Agricultural Experiment Station Research Bulletin, 183, 1953, p. 24.

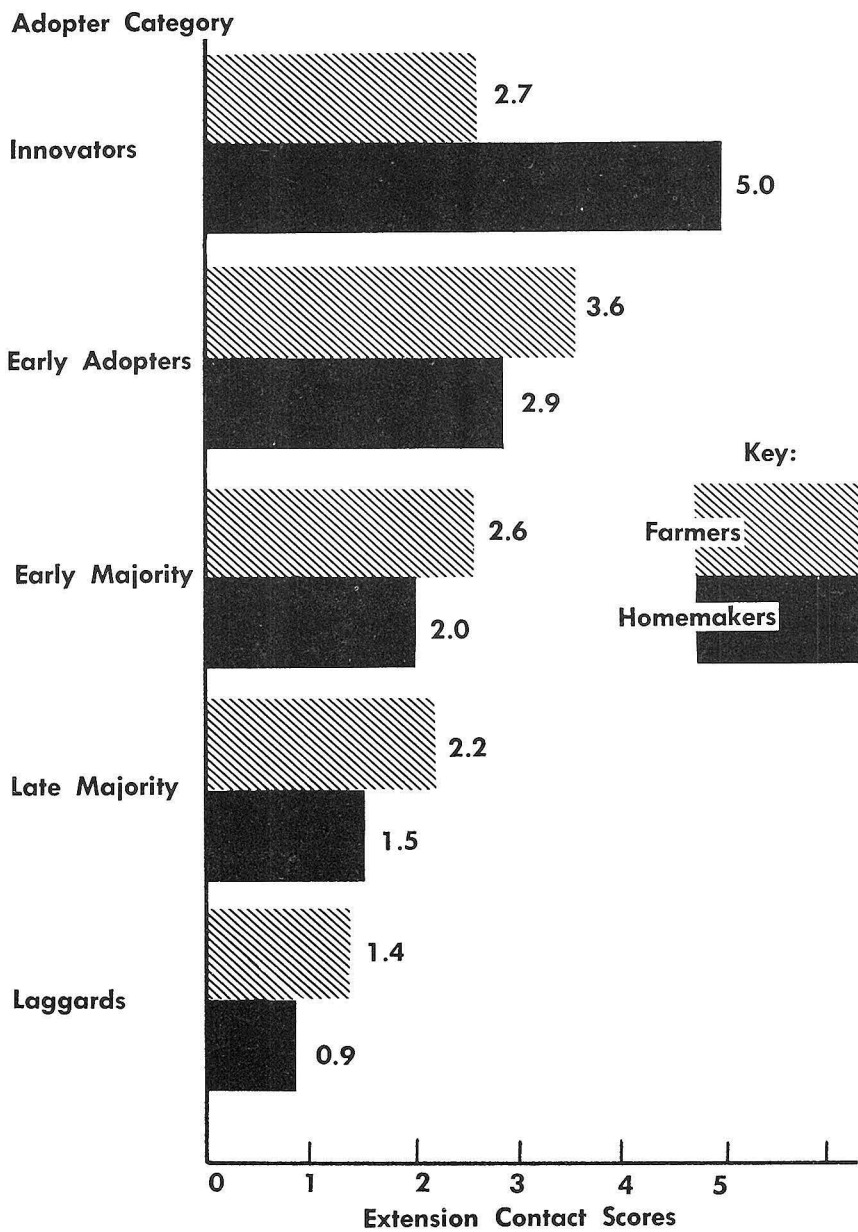


Figure 13. Extension contact by adopter categories for farmers and homemakers

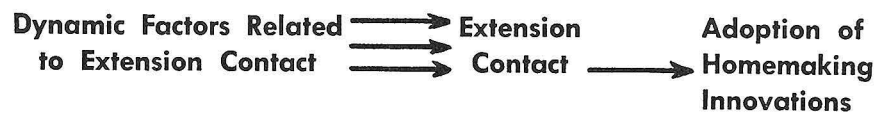


Figure 14. Paradigm showing a suggested strategy of change

Table 9. Factors Related to Extension Contact for Farmers and Farm Homemakers

Order of Importance*	Farmers	Homemakers
1	Social status	Extension acquaintance
2	Extension acquaintance	Social status
3	Opinion leadership	Number of magazines read
4	Education	Education
5	Extension understanding	Extension understanding
6	Adoption of farm innovations	Adoption of homemaking innovations
7	Number of magazines read	Opinion leadership

*Relative importance was determined by the amount of variation in Extension contact scores explained by each factor.

Table 10. Adoption of Innovators for Husbands and Wives

Wive's Adopter Category	Husband's Adopter Category				
	Innovators	Early Adopters	Early Majority	Late Majority	Laggards
Innovators	0	0	2	0	0
Early Adopters	1	0	8	2	1
Early Majority	1	8	12	5	3
Late Majority	0	5	8	10	7
Laggards	0	0	1	5	5
Total	2	13	31	22	16

Table 11. Static and Dynamic Factors Related to Extension Contact For Farm Homemakers

Farm Homemakers' Characteristics	Husbands' Characteristics	
	Static Factors	Dynamic Factors
Static Factors	1. Social status 2. Education	1. Husbands' adoption of farm innovations 2. Husbands' opinion leadership
Dynamic Factors	1. Homemakers' adoption of innovations	1. Extension understanding 2. Extension acquaintance 3. Number of homemaking magazines read

A STRATEGY OF CHANGE

The findings of the present study have important implications for the change agent who is attempting to secure the diffusion and adoption of homemaking innovations. The attempt in the present section of this bulletin is to describe a "strategy of change" for the home economics agent.

The present study indicates that certain factors are related to Extension contact. Some of these factors, for example, years of schooling and social status cannot be altered by the change agent. These factors might be called "static" factors in that they are difficult to change (at least in the short-run) in order to achieve higher Extension contact. However, other factors are "dynamic", such as Extension understanding and Extension acquaintance.¹⁵ Table 11 shows dynamic and static factors related to Extension contact for farm homemakers on the basis of wives' characteristics and husbands' characteristics.

Table 11 indicates that home economics change agents cannot readily change their constituents' social status or education, but they can increase Extension understanding and acquaintance.¹⁶ The home economics agent probably cannot directly change the husbands' adoption of innovations and opinion leadership; they are listed as static for the wife but dynamic for the husband. If change agents would concentrate more of their efforts upon dynamic factors, perhaps they could increase Extension contact.

The eventual goal of increased Extension contact is to lead to the diffusion and adoption of homemaking innovations. The present strategy of change suggested on the basis of the present findings is diagrammed in Figure 14. Perhaps by changing such dynamic factors as Extension understanding, a home economics agent may secure increased Extension contact which in turn may lead to more rapid adoption of homemaking innovations.¹⁷

One finding of the present study was that less educated homemakers had less contact with the home economics agent. These less educated homemakers

¹⁵The distinction between static and dynamic factors was originally suggested by George M. Beal, "Additional Hypotheses in Participation Research," *Rural Sociology*, 21: 249-256, 1956. A somewhat similar categorization of farmer characteristics on a "responsive" or "unresponsive" basis was made by C. Milton Coughenour, *Agricultural Agencies as Information Sources for Farmers in a Kentucky County, 1950-1955*, Lexington, Kentucky Agricultural Experiment Station Progress Report 82, 1959.

¹⁶The factors presented in Table 11 are relatively more static. That is, they may be changed over a long period of time, but are relatively more static in the short-range.

¹⁷A recent analysis by C. Milton Coughenour, in fact, indicates that Extension contact may act as an "intervening variable" between (1) such factors as age, social status, education, and scientific attitudes, and (2) adoption of innovations for farmers. "The Functioning of Farmers' Characteristics in relation to Contact with Media and Practice Adoption", *Rural Sociology*, 25: 283-297, 1960.

may have a special need for adult educational assistance. There may be some justification for additional personnel and facilities to contact hard-to-reach homemakers. Twenty-six percent of the homemakers in the present study were not reached by either personal or impersonal Extension methods.

Perhaps the major findings of the present study is that homemakers and farmers are generally similar in their communication behavior. The same factors are related to Extension contact for both family members. This finding lends support to the current Extension Service emphasis on a farm and home approach.

APPENDIX

TESTS OF SIGNIFICANCE

The relationship between Extension Contact Scores and homemaker characteristics were tested for significance. For example, a correlation of .270 is significantly different from zero; one may be 99 percent sure that a relationship exists. Likewise, a correlation of .206 (when N equals 88) is not significant; the relationship is not greater than could be due to chance sampling effects.

The relationship between Extension Contact Scores and each of the following variables are presented in the strength of their association with Extension Contact Scores.

1. Extension acquaintance, correlation is $\pm .695$ which is significant at the one percent level.
2. Number of magazines read, correlation is $\pm .375$ which is significant at the one percent level.
3. Social class, correlation is $\pm .372$ which is significant at the one percent level.
4. Years of education, correlation is $\pm .305$ which is significant at the one percent level.
5. Adoption of homemaking innovations, correlation is $\pm .301$ which is significant at the one percent level.
6. Extension knowledge, correlation is $\pm .256$ which is significant at the one percent level.
7. Opinion leadership, correlation is $\pm .175$ which is not significant.
8. Age, correlation is $\pm .043$ which is not significant.
9. Venturesomeness, correlation is $\pm .004$ which is not significant.

The following variables were found to be inter-related for husbands and wives.

1. Adoption of innovations, correlation is $\pm .810$ which is significant at the one percent level.
2. Extension contact, correlation is $\pm .442$ which is significant at the one percent level.
3. Opinion leadership, correlation is $\pm .100$ which is not significant.

This page intentionally blank.

This page intentionally blank.